

World Radiocommunication Conference 2003 (WRC-2003)
Initial Post-Conference Report
July 10, 2003

The International Telecommunication Union's Radiocommunication Sector (ITU-R) held its 2003 World Radiocommunication Conference (WRC) from June 9 to July 4, 2003, in Geneva, Switzerland. The Conference broke all past precedents in terms of the scope of the agenda. There were 48 separate agenda items, a figure that represented roughly a doubling of the agenda's size from the previous WRC in 2000. In keeping with the large number of issues to be resolved, some 138 administrations sent a total of nearly 2,300 delegates to the conference. The U.S. Delegation contained 170 members, of whom approximately 40 were "senior advisers"—VIPs from constituent agencies that did not attend the entire Conference.

All significant U.S. objectives were met. This includes agenda items with prominent commercial benefits to the U.S. telecommunications industry, as well as those agenda items that required protection of key U.S. government systems.

The U.S. Delegation's success in meeting its objectives came despite strong resistance from other countries and regional groupings that are U.S. economic rivals or, in some cases, political opponents. As in past WRC conferences, the U.S. differed sharply on several key issues with the Europeans—and particularly the French. The U.S. also encountered disagreements and hard negotiations with some members of the Arab and Asian groups—notably, Syria and Iran. In all cases, however, the U.S. was able to negotiate compromises and agreements that furthered and protected U.S. commercial and governmental interests.

WRC-2003 was chaired by Dr. Veena Rawat of Canada, who was celebrated by the Conference as the first woman to preside over a WRC. Dr. Rawat proved to be an excellent administrator and time manager, shepherding the Conference activities and plenaries to a successful conclusion within the allotted time frame and without a major breach of consensus. Ambassador Janice Obuchowski, Head of the U.S. Delegation, served as a Vice Chairperson and developed an excellent working relationship with the Chairman. Dr. Rawat responded favorably to the U.S. Delegation's focus on the agenda items at hand, on their merits, avoiding any linkage or politicization of the spectrum allocation and regulatory issues.

As foreseen prior to the opening of the Conference, this WRC featured a maturation of the trend, over recent decades, of countries' working through regional telecommunications organizations. The U.S. preparatory process was carried out in close concert with other member nations of CITEL, the telecommunications arms of the Organization of American States (OAS). On many of the issues, the U.S. went into the Conference having developed consolidated proposals with CITEL member nations; these

“Inter-American Proposals” or “IAPs” served the U.S. well in many cases. Regional cooperation, not only within CITEL, but also with other regional groups (e.g., the African Telecommunications Union (ATU) and the Asia-Pacific Telecommunications (APT) group) enabled the U.S. delegation to match and work with the collective power of the European bloc, which operates through the CEPT organization.

In addition to its regional alliances, the U.S. Delegation planned and carried out an extensive outreach effort throughout the month-long Conference. Individual U.S. Delegation members were assigned to cultivate ties with other delegations. Each Delegation member was encouraged to build an informal relationship with his/her assigned country delegation. This technique maximized the size and strength of the U.S. Delegation to provide a face-to-face, personal liaison with every single delegation attending the conference. This was instrumental in an organization such as the ITU, which employs the UN system of weighing each country equally, under a one country, one vote system.

In addition, the Delegation as a whole carried out a substantial program of events to remain connected with key countries and regional blocs. The U.S. reception, held during the first week of the Conference—and sponsored by the U.S. private sector—was the only event to include invitations to every single delegate attending the WRC. The U.S. also hosted joint receptions, lunches and dinners with key voting allies, including CITEL, the African Telecommunication Union, the Russian Delegation and the Asia-Pacific bloc. This outreach effort, carried out consistently over a one-month period, was perhaps instrumental for the exchange of views, the alignment of positions and, eventually, the coordination of plenary actions according to mutual interests that favored the United States.

This report will now turn to an explication of the results of the major agenda items. Following that, there will be a brief discussion of the political aspects of the conference, which were significantly muted compared with past ITU conferences. Finally, the report will offer an assessment of the Conference’s impact on the industry and on future ITU conferences.

Results of Action on Major Agenda Items

The United States Delegation had several objectives going into the Conference, including the following:

- Allocation of spectrum in the 5 gigahertz (GHz) range for Mobile Service, to support wireless local area network (WLAN) systems (e.g., Wi-Fi);
- Upgrade of allocations in the same spectrum range (5 GHz) for Radiolocation, Earth Exploration Satellite Service (EESS) and Space Research Service (SRS);

- A secondary allocation for Aeronautical Mobile Satellite Service (AMSS) in the 14-14.5 GHz band to support commercial roll-out of broadband services for airline passengers;
- Agreement on sharing and coordination mechanisms to protect existing services in the 1100-1300 megahertz frequency range and to allow the upgrade of the U.S. GPS (Global Positioning System) in the Radio-Navigation Satellite Service (RNSS);
- The protection of government Radiolocation systems (i.e., military radars) from interference in the 13.75-14 GHz band, shared with Fixed Satellite Service (FSS) systems;
- Resolution of procedural and planning issues involving Broadcast Satellite Services, as well as the protection of small-sized BSS dishes widely used in the United States; and
- Resolution of issues to pave the way for use of Earth Stations on board Vessels (ESVs) communicating with FSS satellites.

In addition, the U.S. tabled proposals to resolve issues regarding High-Altitude Platform Stations (HAPS), which are expected to provide a new medium for transmission from high-altitude transmission stations in the atmosphere above the Earth. Also, the U.S. came into WRC-2003 opposing any fixed, inflexible or global identification of frequency bands for public protection and disaster relief, believing that any such inflexible definition would be unnecessary and potentially at odds with existing spectrum use in the United States and by the U.S. military's worldwide operations. Finally, the U.S. Delegation, as it had in previous WRCs, sought an allocation for feeder links for non-geostationary satellite systems operating below 1 GHz—the so-called “Little LEO” low-Earth orbiting satellite systems.

The U.S. substantially met each one of these objectives. The following is a more detailed discussion of action on each of the key agenda items mentioned above.

Agenda Items Primarily of Commercial Importance

1. Wireless LAN allocations at 5 GHz (Agenda Item 1.5) — The United States supported the global allocation by WRC of spectrum for mobile service in the 5150-5350 MHz and 5470-5725 MHz bands. This would result in a total of 455 MHz allocated for wireless LANs or, as the ITU classifies such systems, Radio Local Area Networks (RLANs). During the process of preparing for WRC, the U.S. developed proposals that would allow for such allocations while protecting existing services that share these bands. The U.S. position was a consensus one, growing out of a resolution—reached four months prior to WRC—of competing proposals representing government and private-sector concerns over potential interference. The U.S. specified technical parameters, including Dynamic Frequency Selection (DFS), to protect Radiolocation services (radars) at 5 GHz.

Going into the Conference, the primary difference between the U.S. position and others involved whether to allow outdoor use of WLAN devices operating in the 5250-5350 MHz sub-band. The United States proposed permitting outdoor use, while the Europeans proposed to ban it. During the Conference, this issue proved extremely difficult to resolve, with debate persisting well into the third week. Progress was being blocked by the stance of a French drafting group chairman who did not favor the U.S. position in the debate. After a clear stalemate in the debate, however, an ad hoc group was formed, with an Australian chairman, to pursue a resolution on the outdoor use issue.

The fact that the United States was already committed to such outdoor use was a key leverage point in the debate. Given the massive size of the U.S. market and the fact that deployment of Wi-Fi technology is inherently difficult to police, many national delegations may have come to the gradual conclusion that it was expedient from a regulatory perspective to align with the U.S. position. In addition, Wi-Fi manufacturers, including European ones, became more convinced of the benefits of pursuing economies of scale in chip design.

By early in the fourth week of the conference, a compromise agreement emerged that entailed (1) an indoor restriction in the 5150-5250 MHz band to protect Mobile Satellite Service (MSS) feeder links; (2) no ban on outdoor use in the 5250-5350 MHz band, but text encouraging “predominantly” indoor use in the band, and (3) and technical constraints (including an optional antenna emission mask) for use in the 5460-5725 MHz band. What paved the way for this agreement was a softening of Europe’s previous hard-line position calling for a ban on outdoor use in the 5250-5350 MHz band. During the Conference, the U.S. was aware of some degree of flexibility within the European block (CEPT) on this issue, and additional flexibility was shown by Korea, Australia and New Zealand.

The final result represents a global allocation of 455 MHz of spectrum for WLANs, an amount that will provide opportunities for U.S. manufacturers to achieve economies of scale and pioneer new markets in this globally harmonized spectrum. In addition, there is an opportunity, within minimum constraints, for outdoor use of WLAN devices in 355 of the 455 MHz allocated at the Conference. This gives the United States sufficient flexibility to proceed with its own allocations for WLANs, pursuant to the technical parameters developed by the government/private-sector approach developed domestically earlier this year.

2. Extension of space science allocations at 5 GHz (also Agenda Item 1.5) — As part of the same agenda item, the U.S. sought the following:
 - The addition of primary allocations for EESS (Earth Exploration Satellite Service) and SRS (Space Research Service) in the 5460-5570 MHz band;
 - A primary allocation for SRS at 5350-5460 MHz, providing a continuous allocation from 5250-5570 MHz, and

- Protection of an existing EESS allocation at 5250-5350 MHz from mobile services (the RLAN allocations explained in Item No. 1, above).

The primary stakeholder in these objectives was the National Aeronautics and Space Administration (NASA), which substantially achieved its aims. The Conference approved an allocation for both EESS and SRS at 5460-5570 MHz (the first bullet point, above). In addition, the Conference generated a primary allocation for SRS from 5350-5460 MHz, and it secured protection from mobile service operations through two footnotes that prohibit mobile services from causing harmful interference to other services in the band.

Taken as a whole, Agenda Item 1.5 represents a victory for the U.S. delegation, which was able to secure a commercially important set of allocations while simultaneously securing balanced provisions to protect vital NASA operations.

3. Secondary Allocation for AMSS at 14-14.5 GHz (Agenda Item 1.11) — This agenda item was vital for U.S. aerospace and communications companies, including Boeing Corp., which has developed its Connexion service to provide broadband Internet access to airline passengers. The U.S. managed to build broad support for this allocation prior to the Conference, including support from its fellow members of CITEL in North and South America.

Once the Conference began, however, it became apparent that certain other administrations, particularly in the Arab Group (and Iran), saw the commercial importance of this item to the United States as an invitation to engage in procedural moves designed to hold the issue “hostage” and link it to other issues. Although the U.S. delegation saw no regulatory issues with the allocation, several administrations (France, the UK, Italy and some African countries) expressed concern about protection of terrestrial fixed wireless services in the band. The Arab Group and Iran attempted to capitalize on this by tying up the agenda item in Committee 4 (regulatory issues). The U.S. was successful, during the first week of the conference, in ensuring that both Committee 4 and Committee 5 (allocations) would act on the proposed allocation.

The result was that the allocation was approved by the WRC as proposed by the U.S., clearing the way for secondary AMSS operations in the band. While clearance by Committee 4 was delayed until the last week of the Conference, no administration was successful in linking the item to other pending issues. Moreover, the U.S. managed to limit the regulatory provisions to country-specific footnotes, completely avoiding any general restrictions on the allocation. In addition, the Conference adopted a footnote that makes clear that secondary AMSS earth stations (that is, the equipment installed in the airplanes) can communicate with primary FSS satellites. The AMSS allocation became effective immediately following the Conference, on July 5, 2003, clearing the way for roll-out of this commercial service by Boeing and any other companies seeking to enter the market.

4. Broadcast Satellite Service Issues (Agenda Item 1.27) — This agenda item involved, in part, discussions between the Europeans and the Arab Group concerning issues that were not directly contentious for the United States. One issue, however, was potentially important to commercial direct broadcast satellite (DBS) interests, because of the impact of spectrum sharing discussions on protection of U.S. DBS receiver dishes. The United States has some 20 million receiver dishes that are 45 centimeters in diameter, and proposals by some administrations in other regions would have protected dishes only to a minimum of 60 centimeters.

The U.S. Delegation successfully persuaded the Conference to continue protecting satellite dishes down to a minimum of 45 centimeters in satellite Region 2 (which covers the Americas), thus protecting existing U.S. BSS dishes. The United States was able to show that use of the smaller dishes has been fully coordinated with other countries within Region 2. Moreover, coordination with satellite dishes in other regions has never been necessary.

5. Regulatory Provisions and Identification of Bands for HAPS (Agenda Item 1.13) — The major issue in this agenda item was whether 2 X 300 MHz of spectrum in the 27 and 34 GHz bands could be identified for use in additional countries. Before the Conference, those bands were available for High-Altitude Platform Systems (HAPS) only through a footnote, and only in several Asian countries. Another issue was whether a current freeze on filings for new FSS systems would be lifted in the 47 GHz band, which is shared between HAPS and FSS on a co-primary basis.

The primary commercial proponent for this agenda item was a U.S. company, Sky Tower, which had developed, under NASA sponsorship, a system using an unmanned, solar-powered aircraft for use as a high-altitude transmission platform for telecommunications. The United States had contributed Sky Tower studies to the ITU indicating that any potential interference to FSS and Fixed Service systems caused by the system could be predicted and mitigated. The U.S. and CITEL backed a proposal to draft a resolution identifying the bands for HAPS, going into the Conference.

The proposal encountered stiff resistance from the Europeans, leading CITEL (with U.S. support) to modify its proposal to make the proposed resolution apply only to Regions 2 (the Americas) and 3 (Asia), while exempting Region 1 (Europe and Africa). The Europeans continued to oppose the proposal, however, arguing that the close geographic proximity and long border between Regions 1 and 3 would impact negatively on terrestrial systems in Europe. The geographic separation between Region 2 land areas and those of the other regions, however, provided no basis for European opposition to application of HAPS in the Americas. In the end, the proposal was adopted for Region 2, which includes the United States. Several countries in Asia (South Korea, Malaysia, Russia, the Philippines and Kazakhstan, among others), however, added their names to a footnote allowing HAPS in Region 3.

On the second issue, the freeze on FSS filings in the 47 GHz band was lifted for Region 2. Finally, two resolutions were amended and continued, calling for further ITU studies of spectrum bands that could be identified for HAPS in the future.

6. Secondary Allocation for “Little LEOs” (Agenda Item 1.16) — During the 1990s, several satellite companies pioneered the use of low Earth-orbiting satellites (LEOs) to provide Mobile Satellite Services to points anywhere on the globe. The Federal Communications Commission then licensed several so-called “Little LEOs” for delivery of data services to and from remote sites (the “Big LEOs were envisioned as providers of a broader array of voice and data services). The Little LEO operators have been constrained, however, by lack of an adequate global allocation for feeder links (that is, the links providing data between the satellites and ground stations). The FCC decided in a rulemaking proceeding to allocate spectrum in the 1390-1393 MHz and 1430-1432 MHz bands—if those bands were allocated globally at WRC.

The downturn in the satellite industry experienced during recent years had a significant impact upon the U.S. Little LEO providers. In preparation for this Conference, they were late in supporting and providing results of all studies needed to prove that the proposed allocation would not cause interference with existing services. As a result, the U.S. entered WRC-2003 as essentially the sole proponent of this allocation. Given that position of relative isolation at the start of the Conference, the U.S. Delegation achieved a substantial victory at WRC-2003 on this item.

The Delegation won a secondary allocation for Little LEO feeder links in the bands—an allocation which is, however, subject to significant conditions. The allocation will only go into effect when the results of further ITU compatibility studies are presented to WRC-2007, or another future Conference, and that Conference acts accordingly. Whatever technical parameters are applied to MSS systems as a result of those studies will be made retroactive to any MSS systems, including Little LEOs, that file for use of the bands after July 5, 2003.

Although the allocation is conditional, it gives the Little LEO industry time to prepare inputs to the ITU studies that will support the allocation and provide a pathway for compatible sharing in the band. This will set the stage for full implementation of the allocation following the next WRC.

Issues with National Security or Public Safety Implications

7. Sharing and Coordination for RNSS Systems (Agenda Item 1.15) — This issue involved the existing RNSS systems operated by the United States (GPS) and Russia (GLONASS), as well as the planned European system, Galileo. It proved to be the most contentious of WRC-2003 and was not finally resolved until a compromise agreement was endorsed by a plenary session at 11 p.m. on the last business day of the Conference.

The U.S. had been diligently working on resolution of the narrow technical questions that were presented on the WRC agenda itself; the Delegation believed that most of those issues were near resolution going into the Conference. But, given the industrial policy implications of the Galileo system for the European Space Agency (ESA) and the European Commission, this agenda item became freighted with political concerns and posturing on the Europeans' part. It became apparent that the issues motivating some of the Europeans' positions at the Conference went beyond the discrete questions actually on the agenda and implicated broader concerns of viability of Galileo and its positioning at the ITU relative to GPS.

The agenda item at this WRC was a follow-up from WRC 2000, during which new allocations were made to accommodate additional RNSS systems, including Galileo. There were essentially three allocations at issue, all of which were of vital concern to the United States because of the need to secure sufficient flexibility for the coming upgrade of GPS signals.

The issue of RNSS compatibility with Radio Astronomy service in one of the bands (5010-5030 MHz) was resolved without any major problem. All parties agreed to adopt the technical results in a report of the Conference Preparatory Meeting held last year. This met the U.S. objective for this band. Similarly, RNSS/radar compatibility studies for the 1215-1300 MHz band resulted in full agreement between the parties that no power limits needed to be placed on RNSS systems, including GPS. That met the U.S. goal of blocking the imposition of any power flux density limit in the band.

The lightning rod for disagreement proved to be the 1164-1215 MHz band. In this band, the Europeans—in particular, the French spokesman for the Europeans—strongly pressed for application of a formal coordination procedure, detailed in Article 9 of the Radio Regulations. It became apparent that this insistence was rooted in a belief that retroactive application of Article 9 coordination would provide an advantageous position for the Galileo system, which the Europeans insisted had been filed at the ITU before the U.S. filing for the GPS upgrade. This would give Galileo precedence under a first-come, first-served approach, requiring that GPS accommodate Galileo in the coordination process. The U.S., which believed that Galileo may actually have filed too early under the rules, vehemently opposed any retroactive application of Article 9.

Both sides adhered firmly to their positions throughout the first three weeks of the Conference, with CEPT threatening to bring the issue to a formal vote with the support of the Arab Group. (This support appears to have been garnered in a deal with the Arab Group concluded this past spring.)

Final resolution of the issue came with a compromise, in which the Europeans agreed to apply Article 9 only prospectively, to RNSS systems filed in the band after January 1, 2005. This effectively grandfathered both Galileo and GPS, rendering moot any question of precedence under the Article 9 procedure. This represented a victory by the U.S. Delegation, as it will preserve the ability, under informal coordination

mechanisms, for the upgrade of GPS, as planned. Moreover, the U.S. also succeeded in large part in its pursuit of informal coordination threshold criteria designed to ensure that only viable systems—not “paper” satellite systems that may never be built—are factored into calculations for protecting other services in the band. The U.S. success on this agenda item can be attributed to firm resolution to defend its interests and principles and to alert and effective support by all concerned branches of the U.S. government.

8. Spectrum Sharing in the 13.75-14 GHz Band (Agenda Item 1.24) — In this agenda item, FSS interests around the globe sought to relax the restriction on FSS satellite dishes that required them to be at least 4.5 meters in diameter to be used in this band. Countries supporting change in this agenda item sought permission for the FSS dishes to be smaller, thus potentially sparking more widespread commercial use. The United States, despite its strong satellite industry, opposed any such reduction in the satellite dish size because of concerns that it would cause harmful interference to Radiolocation (i.e., Navy radar) operations and SRS activities (including communications vital to the Space Shuttle and International Space Station programs).

Coming into the Conference, the U.S. adhered to a “Method A” option—that is, no change to the dish size. The Europeans and the Arab Group supported a “Method B” option, allowing a reduction in antenna size coupled with power limits to head off interference. The power limit levels favored by Europe and the Arabs were unacceptable to the United States. In addition to the technical values in this Method B approach, the U.S. also had concerns about where the “protection point” would begin, geographically, for Naval radar operations in maritime environments.

These issues were resolved through a compromise agreement, in which the U.S. agreed to a Method B approach, but with power levels that were more strict than those previously suggested by the Europeans or industry proponents of reduced dish sizes. Under the agreement, FSS dishes in the band can be no smaller than 1.2 meters, and power levels cannot exceed a limit of -115 dBW/m² more than 1% of the time. Although the U.S. Delegation did not succeed, against overwhelming opposition, in its original “no change” proposal, it did succeed in negotiating power limits that will protect U.S. government systems operating in the band. Therefore, the compromise met the core U.S. objective of protecting these systems from harmful interference by FSS operations.

9. Earth Stations On Board Vessels (ESVs) (Agenda Item 1.26) — The purpose of this item was to provide an international framework for the operation of satellite ground stations on moving ships. Such ships can be commercial, such as cruise ships, or military. This issue was somewhat complicated by the fact that the U.S. and other proponents sought permission for ESVs to communicate from mobile positions (that is, moving ships) up to satellites in the Fixed Satellite Service (which normally involves stationary ground stations).

The three major regional groups—CITEL (the Americas), CEPT (Europe) and APT (Asia-Pacific)—all submitted proposals allowing ESVs to operate with FSS satellites, while the Arab Group and Iran countered with proposals to designate ESVs as Maritime Mobile Satellite Service (MMSS) operations. The final result was along the lines of the American/European/Asian proposal, in part because of the reluctance to add an MMSS or MSS allocation in the 5.9-6.4 GHz band. The Conference did, however, accept a footnote submitted by the Arabs to the effect that ESV operation would be considered secondary MMSS in the Region 1 countries that subscribe to the footnote.

10. Public Protection and Disaster Relief Spectrum (Agenda Item 1.3) — Going into WRC-2003, several administrations wanted the ITU to identify certain bands for countries to use for emergency response radio systems employed during disaster relief and emergency situations. The goal was to achieve harmonization of these bands across national borders and to achieve economies of scale for manufacturers. The United States supported efforts to spotlight disaster relief but opposed formal identification of bands, under Article 5, for such uses. The U.S. position was that formal identification was unnecessary, since individual countries had already allocated various different bands for these uses. Moreover, a formal identification would limit the flexibility of the United States and other countries to utilize spectrum for these purposes in such a way as to meet local and national interests. Further, band identification can be particularly risky for U.S. national security interests. These operate worldwide and would have experienced harmful interference under some identification scenarios.

During the Conference, an agreement was reached on a resolution providing non-binding guidance to administrations and manufacturers, without identifying bands under Article 5. This met the U.S. objective of avoiding any formal identification. The U.S. also succeeded in suppressing the original resolution on this issue, ensuring there will be no further WRC action in future Conferences.

Resolution 4 and Future Agenda Items

During the final week of WRC-2003, delegates not only worked to hammer out final compromises on the major issues discussed above, they also grappled with two issues that came to the fore in the final days.

The first of these issues was a proposal by selected Arab Group countries (e.g., Syria) and Iran, backed quietly by France and several developing countries, to fix a time limit on the viability of satellite orbital slot assignments. The proposal would have set a limit, originally suggested as being within a range of 20-30 years, for satellite systems, including ones operating and planning new generations. In other words, existing commercial systems would have a window of up to 30 years in which to launch and operate their systems, through single or multiple generations, before having to relinquish their rights to that orbital position. The proponents sought to temper their proposal by exempting some “national” systems and through other possible loopholes.

The proposal represented a direct threat to the viability of commercial satellite systems. The U.S. has opposed, on principle, any fixed time limit that would pull the plug on existing satellite system operations. Any such limit would pose a threat to the ability of commercial satellite systems to win and retain investment, imperiling any recovery of the U.S. satellite industry. When it appeared that the issue was headed for a floor debate, the U.S. Delegation immediately, rapidly and effectively mobilized, utilizing the results of its active outreach program to communicate the seriousness of the threat to the global satellite industry. The U.S. led the charge in the floor debate against the proposal and was joined by an overwhelming show of support from Canada, Australia, Japan, several European states and developing countries in Africa, Latin American and the Caribbean. The result was a resounding and firm defeat of the proposal on the floor during the penultimate night of the Conference.

It appeared clear from the floor statements that multiple administrations around the world perceived the proposal as antithetical to the growth of a free market for satellite services. As such, the proposal would not only threaten the economic viability of the existing satellite providers around the world, it would also harm their ability to provide services that are vital to socioeconomic development of emerging economies.

The Conference also approved a resolution setting an agenda for the next WRC, which is slated tentatively for 2007. The U.S. Delegation succeeded in placing all of the items it required on that agenda. Moreover, the final resolution is important, because it includes fewer than half of the agenda items that were addressed at WRC-2003. This means a reversal of the trend of recent WRCs, which had seen a progressive doubling in the size of the agenda. This result is in keeping with the goals of the United States—and of the ITU itself—to reduce the cost and scope of WRCs in the future.

Political Issues

WRC-2003 was the first major multilateral treaty-level conference in which the United States participated following the commencement of Coalition operations in Iraq. The potential certainly existed for delegations from some administrations opposed to U.S. interests to politicize the conference in an attempt to block or discredit the United States. This did not develop, however, as a problem or distraction at WRC-2003. To an overwhelming extent, delegations confined their interventions to specific points of discussion related to agenda items, with the lone exception of a Cuban protest of U.S. broadcasting operations, made during the opening plenary session.

Delegation members from Iran, Saudi Arabia and Syria made frequent interventions on the floor during plenary sessions, but they generally confined them to radiocommunication issues. Moreover, no groundswell of support was generated by these interventions. There was no attempted exploitation of issues relating to Coalition activities, nor were there politically inspired attacks, on the floor, on other administrations, such as Israel. Delegations generally observed appropriate decorum and confined the discussions to the pressing spectrum allocation and coordination issues

before them. This allowed the delegates to achieve the work of the Conference. Credit for this should go to the delegates themselves, as well as to Dr. Rawat for her professional and effective role in chairing the Conference.

Impact of the Conference for the United States

Because of its role as a technological innovator and market leader, the United States has perhaps more at stake than any other nation represented at the periodic WRCs. Its Table of Allocations is more complex; the number of government and private-sector stakeholders is more profuse; and the sheer sophistication of spectrum-dependent activities is higher than any other country in the world. The number of citizens whose interests it must advance and protect is larger, by far, than the vast majority of countries represented at WRCs. Yet, the United States has just a single vote.

The measure of success for the United States at WRC-2003 was the ability of its delegation to prepare for essentially all of agenda items with potential to impact upon U.S. commercial and governmental interests. The United States, like other countries, must approach this task through careful preparation and coordination with its neighbors and allies—and indeed, with all countries that share its interests. Success in the WRC environment calls for firmness in defending U.S. interests and principles, coupled with technical expertise and diplomatic agility. The result of WRC-2003 indicates that the U.S. Delegation succeeded in this effort.